8 - Solid Refractive Index

SRM 1822a is intended for use in checking the accuracy of visible refractometers based on the immersion of small glass particles in oil. It consists of a soda-lime glass plate, approximately $25 \text{ mm } \times 25 \text{ mm } \times 3 \text{ mm}$, with ground faces. It is designed to be gradually consumed in use by breaking off pieces that are crushed into small particles for oil immersion refractomety.

Technical Contact: simon.kaplan@nist.gov

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

8(8)- Solid Refractive Index

SRM	Description	Unit Size	n (at 22 °C)	Wavelength (nm)
1822a	Refractive Index Standard	1 glass plate(25x25x3mm)	$1.526132 \pm 1.6 \times 10^{-5}$ $1.524468 \pm 1.6 \times 10^{-5}$ $1.523971 \pm 1.6 \times 10^{-5}$ $1.521629 \pm 1.6 \times 10^{-5}$ $1.519535 \pm 1.6 \times 10^{-5}$ $1.517277 \pm 1.6 \times 10^{-5}$	480.1 501.7 508.7 546.2 587.7 644.0

Certified values are normal font. Reference values are italicized. Values in parentheses are for information only.